

## Executive Summary

### Overview

From the time the first military forces met on the battlefield, commanders have realized the importance of determining an adversary's capabilities, disposition, and intent. Attaining this information, while denying an adversary the ability to do the same, allows the commander with superior battlespace awareness to exploit an adversary's vulnerabilities and guarantee success. Phraseology such as dominant battlespace knowledge and information dominance are surfacing in today's military lexicon as new labels for an age-old concept. Operation Desert Storm provided a clear example of how this information dominance can be leveraged to effect overwhelming success on the battlefield. That lesson was not lost on our potential adversaries around the world. While the United States has enjoyed a technological advantage in the past, recent advances in reconnaissance, surveillance, and target acquisition (RSTA) technology are making the ability to reach informational parity more attainable for our adversaries.

C2W is the integrated use of psychological operations (PSYOP), military deception, operations security (OPSEC), electronic warfare (EW), and physical destruction mutually supported by intelligence, to deny information to, influence, degrade, or destroy adversary command and control (C2) capabilities while protecting friendly C2 capabilities against such actions. Joint Publication 3-13.1, Joint Doctrine for Command and Control Warfare (C2W), provides the foundation to allow joint force commanders (JFC) the ability to shape the adversary commander's estimate of the situation and allows the JFC to process information faster than the adversary, which is crucial to gaining and maintaining the information advantage in military operations.

An inherent task in executing a C2W strategy is to influence the adversary's perception of the battlespace in a manner that is favorable to the achievement of friendly objectives. The use of CCD provides JFCs with means of portraying the situation they want the adversaries to observe. CCD is an extremely effective, cost efficient means of denying critical battlespace awareness to the adversary.

In the past CCD was described, primarily by the Army, Marines, and those Air Force organizations responsible for air base protection, as those actions that were conducted for self-protection or security. Traditionally, units employing CCD saw little need for coordination with other units or between elements of a task force. Traditional thought viewed these efforts as basic individual and unit responsibilities that required no detailed coordination other than that required to coordinate the allocation of resources. In essence, these actions were viewed as low-order efforts to impede an adversary's ability to target specific battlefield systems, locations, or fixed/mobile sites that may or may not have been tied to an overall military strategy.

The basic tenet of C2W is the coordinated application of two or more C2W elements to achieve a synergistic effect that would not normally be achieved from

the single or uncoordinated application of these elements in a military operation. In today's fiscally constrained, force projection environment, military forces can no longer afford to employ CCD in isolation. It is imperative that planners coordinate and synchronize the use of CCD to ensure their applications are appropriate, feasible, effective, and in consonance with the JFC's objectives.

### **Fundamentals of C2W and Camouflage, Concealment, and Decoys**

Chapter I introduces the fundamentals of C2W doctrine by describing its objectives and elements that support joint force operations. The focus then narrows to two elements of C2W, specifically OPSEC and military deception, to discuss the need for integrating CCD into joint force C2W operations. The chapter then discusses the basic CCD methods of hide, blend, disrupt, disguise, and decoy as part of an integrated C2W strategy.

### **Organization and Planning**

Chapter II describes CCD considerations that the C2W planning staff must understand and explains how those CCD considerations are tied to the overall JTF C2W objectives. The chapter then explains the steps required to integrate CCD into the component and subordinate unit C2W planning process. It explains the 5-step CCD planning process, to include considerations for the different levels of CCD measures (common, intermediate, and intensive). The final portion of the chapter reviews CCD organizations and resources available within JTF components.

### **Applications**

Chapter III focuses on creating an understanding of the threat and outlines basic CCD considerations to counter the threat. It explains how technology dramatically improves the ability of the individual human being to gather information and make decisions. Technology, however, is not foolproof. This information must still be processed and analyzed by that individual based on training, experience, and perceptions. This makes the individual human, from the operator of a key weapons system to the tactical commander, the target of CCD. This chapter describes the generic capabilities of RSTA sensors and the platforms they are deployed on. It then focuses on the three most common CCD techniques to counter these systems: signature alteration, decoys, and obscurants.